

Application No. 10/137,646
Amendment dated December 8, 2003
Reply to Office Action Mailed on July 6, 2003

REMARKS/ARGUMENTS

Following amendment, forty-eight (48) total claims and four (4) independent claims (claims 1, 6, 26, and 40) remain in this application. Specifically, Applicants seek to amend several of the existing claims and to add new claims 45-48. The claims have been amended to clarify the subject matter of the present invention, to place the present application in better condition for examination, and to correct minor typographical errors in the original claims. As directed by the Office Action, Applicants further wishes to amend the Abstract to correct minor typographical and grammatical errors. Applicants believe that the present Amendment adds no new subject matter and respectfully request the entering of this Amendment.

OATH/DECLARATION

Section 1 of the Office Action objected to the previously submitted declaration as being defective. Following significant efforts by the Undersigned, a new declaration executed by 8 of the 14 inventors is enclosed. A copy of the originally submitted Declaration is also enclosed. The Undersigned further note that the originally submitted declaration is only defective for 5 of the 14 inventors (Jorgen Anderson, Feng Yang, Mudita Purang, Ravi Nandiwada, and Brian Monteiro), and three of these individuals (Mudita Purang, Ravi Nandiwada, and Brian Monteiro) have executed the new declaration. Difficulties have arisen in locating the remaining 2 inventors because of the extended time duration since the filing of the present application and the large number of inventors. As described in the attached Petition Under 37 C.F.R. §1.47(a) and the accompanying Declaration in support of the Petition Under 37 C.F.R. §1.47(a), diligent efforts have been made to locate and contact the inventors, but these efforts have, thus far, been unsuccessful. Accordingly, Applicants believe that the present application should be accepted for

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examination without a validly executed declaration by two of the inventors and that the present application is thus in condition for allowance.

ABSTRACT AND CLAIM OBJECTIONS

Sections 2 and 3 of the Office Action object, respectively, to the abstract and claims for minor typographical and grammatical errors. The Applicants have attempted to address the cited irregularities as well as other minor errors through the this Amendment. It is believed that the Amendment adds no new subject matter to the present application and should be entered. Applicants believe that the grounds for objection contained in paragraphs 2 and 3 have been addressed, and that present application is in condition for allowance.

CLAIM REJECTIONS UNDER 35 USC §103(A)

Sections 4-5 of the Office Action rejected claims 1-3, 6-7, 10-24, 26-27, 29, and 31-42 under 35 USC §103(a) as being unpatentably obvious in view of the combination of US Patent No. 5,974,403 issued to Takriti, *et al.* (the “403 patent”), US Patent No. 6,021,402 issued to Takriti (the “402 patent”), and US Patent No. 5,189,606 issued to Burns, *et al.* (the “606 patent”). Similarly, Section 6 of the Office Action rejected claims 4-5, 8-9, 28, 30, and 43-44 under 35 USC 103(a) as being unpatentable over the combination of the ‘403 patent, the ‘402 patent, and the ‘606 patent, further in view of US Patent No. 5,918,209 issued to Campbell (the “209 patent”). Section 7 of the Office Action then rejected remaining claim 25 under 35 USC 103(a) as being unpatentable over the combination of the ‘403 patent, the ‘402 patent, the ‘606 patent, and the ‘209 patent, further in view of US Patent No. 5,953,707 issued to Huang, *et al.* (the “707 patent”). Applicants have carefully reviewed each of the cited references and respectfully submit that these references,

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either separately or in combination, do not teach or suggest the claimed embodiments of the present invention.

As provided in MPEP §2143, three basic criteria must be met to establish a *prima facie* case of obviousness:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

As an initial observation that Applicants note that the Office Action does not address the first two prongs of this test is anyway. The Office Action does not provide any motivation to combine the cited references, as required in MPEP §2143. As further addressed in MPEP §2143.01, "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention **where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art** [Emphasis added], citing to In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art."). See, also, In re Lee, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references). Applicants particularly note that MPEP §2143.01 clearly states that the mere fact that the cited references can be combined or modified is not sufficient to establish *prima facie* obviousness, citing to In re Mills, 916 F.2d 680, at 682, 16 USPQ2d 1430 (Fed. Cir. 1990) (Although a

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prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.").

MPEP §2143.01 further adds that the mere fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish prima facie obviousness. Specifically, the Office Action must present some objective reason to combine the teachings of the references.

Applicants respectfully suggest that motivation to does not exist to combine the references since they concern different specific markets that appear to be inherently incompatible. As described below, the '403 and the '402 patents specifically relate to pricing in the electrical industry, the '606 patent specifically concerns cost tracking in defense-related construction by multiple third-party subcontractors, and the '209 patent concerns ticket pricing in the airline and other travel industries. Unlike the other cited references that relate to pricing, the '707 patent provides a system for evaluating the status of a supply chain at different locations and times. There is simply no suggestion in these references or in the existing state of the industry that gives a motivation to combining the references from different fields.

Applicants particularly note that the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure, In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), and Applicants believe that there is no discussion in the Office Action of a motivation to combine the cited references except to discuss the claimed aspects and to locate these aspects on a piecemeal basis.

Turning now to the second prong of the test for obviousness under 35 USC §103, the Office Action does not address the feasibility of combining the cited reference in order to achieve the claimed embodiments of the present invention. While the Office Action asserts that it would have been within the ordinary skill of

the art to modify and combine the cited references, MPEP §2143.02 requires the Office Action to present a reasonable expectation of success to combine the cited references. As stated in greater detail in the detailed discussion of the references, Applicants strongly believe that it would be impossible to combine the cited references to form the claimed embodiments of the present invention. The Target Pricing System of the present invention was formed only through great efforts and represents a significant change from existing apparatuses.

Turning now the next part in the three-prong test for Obviousness under §103 summarized in MPEP §2143, Applicants further believe that the prior art reference (or references when combined) do not teach or suggest all the claim limitations, as described in greater detail below.

The claimed embodiments of the present invention provide a system and method for producing an optimal bid value that balances the probability of winning the bidding contest in a conventional auction with the expected profitability from winning the bid. As described in the background section of the patent application, a bidding situation often involves difficult decisions for business whereby a lower bid increases the possibility for winning the auction using but results in lower profits from providing the subject goods or services. An organization that wins too few auctions will fail for lack of business, while an organization that underbids to win an auction will fail to maximize profits or even lose money on the bidded auction. Also, a lower bid may cause competitor to offer lower bids in response, lowering profits without any benefit to the bidders. Furthermore, different levels of goods and services incur different levels of costs/profits to an organization. For example, an organization may be able to profitably provide X widgets at price P but may lose money providing 2X widgets at Price P due to increasing marginal costs (such as the cost associated with additional, less efficient goods and services procurement). The present invention further examines other factors that would determine auction

outcomes, such as the actions of competitors (e.g., their likely bidding actions and overall willingness to join the auction) and the prior relationship with the purchaser. Referring now to Claim 1, which is discussed in greater detail below, the present invention provides a target pricing system for obtaining an optimal bid in an auction. The system includes a product model having various pricing possibilities for a commodity and information on the profitability at each of the pricing possibilities. The Competitor price model likewise calculates net prices for competitors. A market response model then calculates the likelihood of winning with the bid value as a function price. Similar limitations are also contained in the other independent claims 6, 26, and 40. Claim 6 and 26 (along with claims 2 and 41) further add an optimization model that computes a target price that maximizes Expected Contribution (the probability of winning the auction at the price multiplied by the profits at the price as represented by net prices minus marginal costs).

'403 Patent

In contrast, the '403 patent merely provides a system for preparing a probabilistic pricing model for a commodity (electricity) at different locations and times. In particular, the '403 patent looks to various supply factors (e.g., excess capacity as represented by suppliers' production capacity minus consumer demand), demand factors (e.g., weather), pricing functions, and transaction costs (e.g., transmission costs). The '403 then uses these inputs to estimate prices for the commodity at different location and times. These prices only reflect a forward estimate of the market price at the particular time and location, and could not provide any assistance in auction type situation. Thus, the '403 patent could not be used in a bid-type situation to guide a potential bidder in preparing an optimal bid that balances the costs for the commodity, the likelihood of winning the bid, and the

expected profits from winning the bid. These prices are considered to be static and not subject to change or negotiation. Thus, the '403 patent could not be used to guide an organization in preparing a bid to provide electrical power, other than to suggest the spot price in a market. The '403 patent does not address the possibility of an organization offering different prices (as provided by the product model), the possibility of competitors offering different prices in response to a bid (as provided by the competitor net price model), and does not address the effects if changing price. By way of example, if an auction was held to provide electrical power, the '403 patent would guess supply and demand conditions based on weather patterns and use these supply and demand conditions to suggest market conditions at various times and locations. The '403 patent could not suggest the results when one of the power suppliers offers a different price, where the results reflect the costs of that price to that power supplier, the response of the other power suppliers to the change in price, and possibility of selling power at the different price.

Applicants further note that the '403 patent is strictly limited to the electrical industry and contains no suggestion of application to other commodities, thus lacking the broad applicability of the present invention. The electrical power market is unique in that electrical power is entirely non-distinct (buyers do not care where the power is produced) and so the purchasing decision are based entirely on price. Thus, the chance of having a lower bid accepted would be 100% or unity.

Applicants further note that the '403 patent does not teach or suggest the optimization module that calculates a target price to maximize expected contribution. The '403 patent simply does not address calculation of expected contribution since it does not address the possibility of winning an auction or the expected profits from winning auction at a particular price as represented by net prices minus marginal costs.

'402 Patent

Looking now to the '402 patent, that reference also does not teach or suggest any elements of the claimed embodiments of the present invention. Referring back to the previous discussion of the '403 patent, the claimed embodiments of the present invention provide a system and method that looks at different possible bid amounts and calculates profits and cost associated with each bid amount. The present invention also employs a competitor price model that estimates competitors' responses to each bid amount. The present invention then uses a market response model to calculate a probability of winning the auction at each of the bid prices, in view of the competitor pricing model. Embodiments of the present invention further provide an optimization module that provides a bid amount to maximize expected contribution. Applicants strongly believe that the '402 patent does not teach or suggest any of these claim elements. Instead, the '402 patent provides a system for scheduling power production in view of expected demand, fuel costs, the profitability and demand for excess production, and the availability and costs for purchasing power as needed satisfy unmet demand. Similar to the '403 patent, the '402 may use estimates of future weather conditions to estimate consumer demand and available third party excess supply. The '402 patent adds additional features that allow a user to modify fuel costs. However, the teaching of the '402 patent are simply incompatible with the present invention's calculation of a target price in an auction. With specifically reference to the product module in claims 1, 6, 26, and 40 that provides different possible bid values in an auction, the prices data used in the '402 patent only reflect a forward estimate of the market price at the particular time and location, and could not provide any assistance in auction type situation. Thus, the '402 patent could not be used in a bid-type situation to guide a potential bidder in preparing an optimal bid that balances the costs for the commodity, the likelihood of winning the bid, and the expected profits from winning the bid. These

prices are considered to be static and not subject to change or negotiation. Thus, the '402 patent could not be used to guide an organization in preparing a bid to provide electrical power, other than to suggest the spot price in a market. The additional features of the '402 patent allow a user increased control over the fixed price associated with different levels of electrical pricing, but in now represent different possible bid prices for an auction. The '402 patent simply does not address the possibility of an organization offering different prices (as provided by the product model), the possibility of competitors offering different prices in response to a bid (as provided by the competitor net price model), and does not address the effects if changing price. Returning to the example of the electrical power auction example provided above in the discussion of the '403 patent, the '402 patent would guess supply and demand conditions based on weather patterns and use these supply and demand conditions to suggest market conditions at various times and locations. The '402 patent could not suggest the results to a bidder when one of the bidding power suppliers offers a different price, where the results reflect the costs of that price to that power supplier, the response of the other power suppliers to the change in price, and possibility of selling power at the different price. The '402 patent is really a purchasing tool that allows the purchaser to forecast supply and demand conditions and to used these conditions to minimize energy purchasing costs.

Applicants further note that the '402 patent is also strictly limited to the electrical industry and contains no suggestion of application to other commodities, thus lacking the broad applicability of the present invention. The electrical power market is unique in that electrical power is entirely non-distinct (buyers do not care where the power is produced) and so the purchasing decision are based entirely on price. Thus, the chance of having a lower bid accepted would be 100% or unity.

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m. Sale*

Applicants further note that the '402 patent does not teach or suggest the optimization module that calculates a target price to maximize expected contribution. The '402 patent simply does not address calculation of expected contribution since it does not address the possibility of winning an auction or the expected profits from winning auction at a particular price as represented by net prices minus marginal costs, since as stated above, the '402 patent does not address the possibility of winning an auction at different prices or the profits associated with the different prices. The probability model provided in the '402 patent addresses the occurrence of possible events that influence electrical costs and does not address, in any way, the possibility of winning an auction at different prices.

'606 Patent

As with the '402 and the '403 patents, the '606 patent represents a buyer's tool that is simply unable to assist a bidder in assessing different potential bid amounts in a competitive auction. In particular, the '606 patent provides a system for estimating fair construction for different structures in different areas. The Applicants note that the '606 patent has particular application to government contracts, where a single buyer (the government) is seeking to differentiate between cost for different structure in different areas. As with the '402 and '403 patents, the '606 patent could be used to determine the costs associated with acquiring a good or service. However, as stated above, this feature does not teach the elements contained in the claimed embodiments of the present invention. Returning to claim 1, the '606 patent does not present or suggest a product module that provides different possible bid amounts for a good or service. The prices provided in the '606 patent are absolute, reflecting fair construction costs for different structures in different areas. Furthermore, the '606 patent does not provide a product module containing different costs associated with each of the bid prices. The costs in the

'606 patent are assumed to be static, regardless of the bid price. The '606 patent further does not contain or suggest a competitor module that contains competitor prices for each bid amount. The '606 patent simply contains actual cost for the suppliers, and does not address a change in these prices if one of the suppliers offers a different rate. Similarly, the '606 patent, since it does not deal with auction bidding, does not address a market response model that calculates the possibility of success associated with each bid price. The '606 patent assumes a static "fair price" and uses these prices to assess bids, with lower bids representing bargains and higher prices presenting bad deals. As with the '402 and '403 patents, the '606 patent assumes a 100 percent possibility of winning a bid with a lower price. The probabilistic model in the '606 patent, as with the '402 model represents different possible costs, which are somehow considered when determining the status fair price.

Continuing with the optimization model of claim 2, 6, 26, and 41 for calculating a target price that optimizes expected contribution, the '606 patent does not and cannot provide or suggests such an element since the '606 patent simply does not address calculation of expected contribution. In particular, this reference does not address the possibility of winning an auction at different prices or the expected profits from winning auction at a different price (as represented by net prices minus marginal costs). The probability model provided in the '606 patent addresses the occurrence of possible events that influence construction costs and does not address, in any way, the possibility of winning an auction at different prices.

Applicants thus respectfully request reconsideration and allowance of independent claims 1, 6, 26, and 40, along with the remaining claims depending therefrom.

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Conclusion

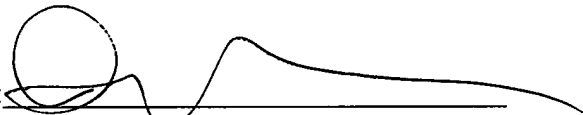
In view of the foregoing, the Applicants respectfully request that the Examiner considers the above-noted amendment when the application is examined on its merits and that the Examiner issues a timely allowance of the pending claims. The Examiner is invited to contact Applicants' undersigned representatives to expedite prosecution.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1349.

Respectfully submitted,

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